

[10191/3699]

**REPLY UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
GROUP ART UNIT 3752**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s) : Frank MILLER et al.
Serial No. : 10/534,331
Filed : March 20, 2006
For : ATOMIZATION SYSTEM
Examiner : Darren Gorman
Art Unit : 3752
Confirmation No. : 9783

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I hereby certify that this correspondence is electronically transmitted
to the USPTO via the Office of electronic filing system on:
Date: February 11, 2010
Signature: Kevin Kambo
Kevin Kambo

REPLY UNDER 37 C.F.R. § 1.116

SIR:

In response to the Final Office Action of December 11, 2009, whose
two-month response date is February 11, 2010, kindly amend the above-captioned
application without prejudice as follows:

Amendments to the Claims are reflected in the listing of claims,
which begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

While no fees are believed to be due, the Commissioner is authorized,
as appropriate and/or necessary, to charge any fees or credit any overpayment to
Deposit Account No. 11-0600.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 13. (Canceled).

14. (Currently Amended) An atomization system for a fuel, comprising:
a fuel injector;
an atomization tube including at least a first section and a second section, the first section having at least one of an outer diameter and a wall thickness that is different than that of the second section;
an air inlet; and
at least one metering aperture;
wherein the second section is formed at a downstream side of the first section;
wherein the second section includes a plurality of bore holes at each of a plurality of positions on an outer wall of the atomization tube, along a length of the atomization tube; and
wherein diameters of the bore holes at each position on the outer wall of the atomization tube along the length of the atomization tube increase in a downstream direction;
wherein the second section is divided into multiple subsections; and
wherein the outer diameter of the atomization tube is greater in a first one of the subsections than in a second one of the subsections.

15. (Previously Presented) The atomization system as recited in Claim 14, wherein:

the atomization system is for charging a chemical reformer in order to obtain hydrogen.

Claims 16 to 20. (Canceled).

21. (Currently Amended) The atomization system as recited in Claim 20 14, wherein:

the second of the subsections coincides with a respective position.

22. (Previously Presented) The atomization system as recited in Claim 21, wherein:

a plurality of bore holes are formed in the second of the subsections.

Claims 23 to 24. (Canceled).

25. (Previously Presented) The atomization system as recited in Claim 14, wherein:

an outer shaping of the atomization tube is achieved by one of turning on a lathe, grinding, and erosive machining.

26. (Previously Presented) The atomization system as recited in Claim 14, wherein:

a diameter of the bore holes is approximately 100 μm to 250 μm .

27. (Previously Presented) The atomization system as recited in Claim 26, wherein:

a ratio between a diameter and a length of the bore holes is at least equal to 1.